

INSTRUCTION MANUAL



Carbon Monoxide Detector DEGA HBC Home



ISO 9001:2008
Quality Management Systems
Système de Qualité
www.sgs.com



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DEGA CZ s.r.o. bears no liability for any damage resulting from the use of this device!

▼ FOR YOUR PROTECTION



Watch out for static electricity

Prior to installing or handling the product, ensure that you do not have an accumulated static charge. Touch a grounded metal object to trigger the discharge of any accumulated electric charge. Otherwise the product could suffer damage.



In the event of any failure of the equipment unplug it immediately

If you notice an unusual odour or smoke emanating from the product, unplug it from the mains and from all peripherals. Continued operation could result in injury or property damage. After disconnecting the product deliver it to an authorised service centre or the manufacturer for inspection.



Do not use the product in the vicinity of flammable gases or in areas where there is a potential occurrence of these gases.

Do not use electronic equipment in the vicinity of flammable gases; this could potentially cause a fire or an explosion. The product is not designed for use in industrial or commercial spaces nor in „Ex“ hazardous areas.



Do not disassemble the product and ensure against its contact with water

Contact with internal components of the product may cause an electric shock. In the case of any failure refer the servicing of the product exclusively to a certified service centre. Contact with water can create a short circuit in the product and consequent damage to property or personal injury.



Install a detector for each possible source of carbon monoxide

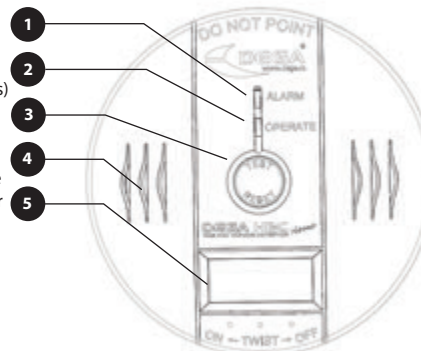
Mount a detector on each gas appliance or at any source of carbon monoxide (e.g. a garage etc.). The detector safely detects gas leaks only in the room in which it is located and in which there is direct contact with the gas. For example, if the leak occurs in another room or another part of the house, the detector does not detect a gas leak.

▼ TECHNICAL DATA AND INFORMATION

Supply voltage:	3 x 1.5V battery of the AA type (preferably alkaline batteries)
Supply voltage in the standby mode:	< 50µA (with LCD display off) < 200µA (with LCD display on)
Supply voltage in the alarm mode:	< 75mA
Type of sensor:	electrochemical
Expected operational life of the sensor in a clean environment:	1-2 years (max.3 years)
Internal speaker acoustic performance:	85 dB at 1m
Operating temperature range:	max. -5°C to +40°C
Relative humidity of the ambient air:	20% - 90%
Responsiveness and time delay:	at 50ppm, the alarm will switch on in 60 to 90 minutes 100ppm, the alarm will switch on in 10 to 40 minutes 300ppm, the alarm will switch on in 3 minutes

▼ POPIS VÝROBKU

- 1 - The red indicator - "ALARM" (LED, alarm)
- 2 - The green indicator - „OPERATE“ (LED, signalling the power status)
- 3 - The "TEST/RESET" button
- 4 - Air holes for the access of the gas to the sensor of the detector
- 5 - Display



▼ INSTALLATION, ASSEMBLY AND DISASSEMBLY

WHERE TO INSTALL THE DETECTOR

Place the detector at a height of 150-160 cm above the floor in each room on every floor where there is a potential source of a dangerous concentration of carbon monoxide (CO), and in particular in:

a) kitchens / dining or living rooms / halls / bedrooms / escape corridors
(Source: combustion from a fireplace or from a gas appliances – a gas stove and/or oven, gas convection heaters - „heating elements“ - etc.)

b) garages (exhaust from cars)

c) technical rooms (cellars, bathrooms, etc.) in which boilers are installed.

Note: If only one detector is available, place it in the hallway outside the bedroom, or directly inside the bedroom, and do not close the doors to the individual rooms. It is a closed door that might be the reason why a sleeping person does not hear the acoustic alarm of a detector located outside the bedroom. It is a matter of course to ensure that the alarm is audible in all the bedrooms.

Recommendation: In each area/room, for safety reasons, install a minimum of two detectors (if damage to one detector occurs at least one backup detector will remain functional). In each room install one detector for an area corresponding to that of a circle with a diameter of 7-10 m.

WHERE NOT TO INSTALL A GAS DETECTOR

1. Do not install the detector up to 0.9 meters by the door to the kitchen or bathroom, artificial inlets warm or cold air, ceiling fans, air conditioning ducts or other places with high air flow. Avoid dusty and dirty places and places with high grease. Dust, grease and cleaning agents contaminate the detector probe and can disrupt proper operation.
2. Do not place the detector in a location where it will be shielded by curtains or other objects. Gas must have free access to the detector, only then it will correctly detect explosive and flammable gases. Do not install the detector at the center of the vaulted ceiling or roof shields. Avoid damp and wet locations.
3. Do not place the detector in rooms in which the temperature could drop below 4.5 °C or, vice versa, where it could exceed 37.5 °C – this could provoke a false alarm.
4. Do not install the detector in any excessively dusty, dirty or insect-infested areas, where particles released into the air could impair the functioning of the detector.

Attention: If you place the detector close to a shower or a cooker, because of the extent of the content of water vapour the inducing of a false alarm can occur.

ASSEMBLY OF THE DETECTOR

- 1. Twist the detector body counter-clockwise and remove the mounting plate from the back of the detector.
- 2. Hold the plate against the area to which you wish to attach the detector. Use a pencil to mark the positions for both the holes for the mounting plate on the surface.
- 3. Drill holes into the points marked and hammer in anchors. Screw the screws with sealing rings halfway into the anchors, then attach the mounting plate of the detector to them. Tighten the screws (see Figure 3).
- 4. Insert the batteries into the battery compartment and close the cover. Align the detector body with the mounting plate and rotate the detector body clockwise until it clicks (see Figure 5).
- 5. Test the detector by pressing the „TEST“ button.

DISASSEMBLY OF THE DETECTOR

- 1. Twist the detector body counter-clockwise and remove it from the mounting plate (see Figure 6).
- 2. Unscrew the two screws that attach the mounting plate to the wall.

CONNECTING THE BATTERIES

Connect three 1.5V AA alkaline batteries to the detector. Pay attention to ensure their correct polarity.

REPLACING THE BATTERIES

- 1. Turn the detector body counter-clockwise and remove it from the mounting plate.
- 2. Remove the old batteries and insert the new batteries into the battery compartment. Attach the detector body to the mounting plate and rotate the detector body clockwise.
- 3. Test the detector by pressing the „TEST/RESET“ button.

▼ OPERATIONAL INSTRUCTIONS

THE TEST FUNCTION

Press the „TEST/RESET“ button for a few seconds to start the auto-test of the electronics. An audible warning sounds. If the alarm beeps every 30 seconds and the green light does not flash or if the display shows „Err“, the device is not working properly and must be sent for servicing.

CAUTION: If the alarm sounds and you are not performing the test this represents a real alarm!! THIS ALARM REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

THE RESET FUNCTION

Press the „TEST/RESET“ button alarm during an alarm to mute it for a few minutes. If the concentration of carbon monoxide that triggered the alarm does not decrease during a specific time-period, the alarm starts-up again. At concentrations of carbon monoxide in the range of 70 ppm to 200 ppm this time-period is about five minutes; at concentrations of above 200 ppm the interval is practically zero, i.e. the alarm is almost immediately reactivated. If the concentration of carbon monoxide decreases to below 70 ppm the alarm is not reactivated.

THE MEMORY FUNCTION

If the alarm has been activated during a period in which you have been outside the residence, you can use this button to obtain information concerning the levels of carbon monoxide measured during your absence. Press the button for a few seconds; the green LED will start flashing at a frequency of once per second and the display will show the values of carbon monoxide measured. Attempt to identify the source of the carbon monoxide and to get it under control. Pressing the button again returns the device to its normal mode or this will happen automatically after one minute.

THE LED INDICATORS

Red LED – “ALARM” - flashes in sync with the audible alarm in the event of a leakage of carbon monoxide. Additionally it blinks whenever the alert sounds that signals a low battery condition or that the device is not working properly.

Green LED – “OPERATE” - indicates the correct functioning of the detector. In the event of the proper functioning of the device the green LED flashes at intervals of 30 seconds. If the green light is not flashing this means that the device is not working properly.

Note: The „TEST / RESET“ button reliably tests all the functions of the gas detector. Do not attempt to test the detector in any other manner. Carry out the testing regularly by pressing the „TEST / RESET“ button once a week and always after returning from a longer absence.

▼ MAINTENANCE

- 1. **at least once a day** – carry out a visual examination of the power supply of the detector (i.e. ensure that the green „OPERATE“ LED is flashing)
- 2. **once a week** - carry out a functional test of the gas detector by pressing the „TEST / RESET“ button for 5 seconds.
- 3. **at least once a month** - remove dust and dirt from the surface using a soft cloth or the brush attachment of the vacuum cleaner set at the lowest performance-level.
- 4. **at least once a year** – replace all the batteries with new ones.
- 5. in the event of the occurrence of large-scale contamination disconnect the detector from the battery and clean the detector surface with a damp cloth. Do not use any liquid cleaners.

When using cleaning agents or other chemical agents sufficient ventilation of the area in question is requisite. Compounds that may affect or damage the sensor and cause erroneous measurements include: methane, propane, isobutane, isopropanol, ethyl acetate, alcohols, lacquers, paints, thinners, solvents, glues, hair spray, aftershave, perfume, and certain cleaning materials. If it is necessary, it is possible to check the functioning of the detector using calibration gas, i.e. 130-150 ppm CO in synthetic air.

Do not use the device for a longer period than that of the lifetime of the sensor in the detector!

When installed in commercial buildings, the device must be placed in operation by trained employee and its calibration must be conducted at least once a year. (Calibration can only be carried out by a service-person certified by the manufacturer or by the manufacturer).

▼ WHAT TO DO IN THE EVENT OF THE ACTIVATION OF THE ALARM

- 1. Please be sure to act calmly and judiciously.
- 2. Call the fire department (ambulance).
- 3. Immediately move into fresh air - preferably outdoors, but at least to an open door or window. Ensure that nobody remains in the contaminated area. Do not return to the contaminated area and remain in the fresh air until the fire-fighters (ambulance) arrive(s). Wait until the premises are thoroughly ventilated and the detector returns to its normal measurement mode.

Never continue to use any faulty appliance that can be a source of carbon monoxide until after it has been repaired.

AN ALARM REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION!

This device detects carbon monoxide only in the vicinity of the detector. Carbon monoxide may also be present in other areas, not only in the vicinity of the detector!

▼ SYMPTOMS OF CARBON MONOXIDE POISONING

The symptoms of the initial stage of carbon monoxide poisoning are similar to those of flu but with an absence of fever. A person may experience dizziness, a severe headache, nausea, while vomiting and disorientation may also occur. Carbon monoxide poisoning can occur in any individual, however, experts warn that most vulnerable to it are babies, pregnant women, seniors and individuals with heart or respiratory problems. If you notice any symptoms of carbon monoxide poisoning seek medical help immediately! The result of exposure to carbon monoxide includes the following symptoms and all family members should be made familiar with them:

- 1. Low-level exposure to carbon monoxide: A slight headache, nausea, vomiting, fatigue (these symptoms are often described as being similar to the symptoms of influenza).
- 2. Medium-level exposure to carbon monoxide: A strong throbbing headache, lethargy, confusion, a fast heart-rate.
- 3. High-level exposure to carbon monoxide: Unconsciousness, convulsions, cardio-respiratory failure, death.

▼ REPLACING THE BATTERIES

A short beep every 30 seconds indicates a low energy level of batteries. Before replacing the batteries, first remove the detector from the mounting plate. Then open the battery compartment, replace the batteries and attach the detector back to the plate. Press the „TEST/RESET“ button to start the self-testing of the device and make sure that the green LED is flashing every 30 seconds. Use only batteries from reputable manufacturers! CAUTION: Do not press the „TEST/RESET“ button during battery replacement or the unit will not function. **After inserting the batteries in the unit the device will beep, thereby confirming the correct insertion of batteries.**

▼ GENERAL WARRANTY TERMS AND CONDITIONS

When the instructions for installation, operation and maintenance are followed the manufacturer guarantees a warranty period of 24 months from the date of receipt of the product. When claiming a product defect it is necessary to submit a proof of purchase that contains the following information: name and surname of the purchaser, name and business name of the seller and his/her identification number; if the seller is a legal entity its name, identification number, registered office; if a natural person – the first name, surname, address and the warranty card, if the buyer received one from the seller. The validity of the warranty shall not be affected by non-compliance with the obligations related to the issuance of the warranty card.

- 1. Claims concerning the product (for a warranty repair only complete devices are accepted) may be filed during the warranty period only with the seller from which it was purchased; subsequently the seller is required to forward the product to an authorised service centre or to the manufacturer.
- 2. This warranty is not applicable to:
 - damage caused by fire, water, static electricity, power surges in the electric supply or in the public network, accident, improper use of the product, wear and tear
 - contamination of the product and its subsequent cleaning,
 - damage caused by any adjustment, modification or improper manner of use inconsistent with the instruction manual, the technical standards or the applicable safety regulations in the Czech Republic,
 - damage to the product during transportation caused by improper handling or handling of the product in a manner contrary to the advice provided in the instruction manual,
 - DEGA products **that have been used in association with other than original DEGA products, including consumables and accessories, the setting (calibration) of detectors**
 - wear and tear or damage to the sensors in detectors, including the need for their replacement
 - wearing parts and consumables (e.g. the wrench for removal of sensors, gaskets, etc.) that are detrimental to normal wear and tear during operation, together with wear and tear of the product and its components caused by their normal use.
- 3. Claims regarding a product defect that can be dealt with reasonably quickly and without additional consequences will be resolved by remedying the defect (repair) or by replacement of the product part , because in such a case it is a contradiction of the standard norms that the entire product shall be replaced (§ 616, paragraph 4 of the Commercial Code).
- 4. A buyer who exercises the right of warranty repair is not entitled to the return of the parts that have been replaced.
- 5. For the complete version of the general business conditions and of the claims procedure go to www.dega.cz

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